

Claims

- [c1] A method of selecting a communication system, comprising:
 receiving at least a quality indicator for a channel;
 scanning any channels on a channel scan list in response to at least the quality indicator of the channel being below a predetermined threshold value; and
 acquiring another channel from the channel scan list in response to the other channel having at least the quality indicator greater than or equal to the predetermined threshold value.
- [c2] The method of claim 1, wherein at least the quality indicator comprises an E_C / I_O of a code division multiple access (CDMA) pilot channel.
- [c3] The method of claim 1, wherein scanning any channels in the channel scan list comprises skipping any channels on a grey zone channel list.
- [c4] The method of claim 1, wherein any channels in the channel scan list comprises:
 scanning at least channels in a preferred roaming list; and
 skipping any channels on a grey zone channel list.
- [c5] The method of claim 1, further comprising:
 receiving at least another quality indicator after a predetermined time period before scanning any channels in the channel scan list; and
 scanning any channels in the channel scan list in response to the at least other quality indicator being below the predetermined threshold value.
- [c6] The method of claim 5, further comprising adding the channel to a grey zone channel list in response to receiving at least the other quality indicator signal below the predetermined threshold value.
- [c7] The method of claim 1, further comprising:
 starting a hysteresis timer after receiving at least the quality indicator below the predetermined threshold value;
 receiving at least another quality indicator after the hysteresis timer expires and before scanning any channels in the channel scan list; and
 scanning any channels in the channel scan list in response to the at least other quality indicator being below the predetermined threshold value.

- [c8] The method of claim 1, further comprising performing an initial acquisition scan in response to failing to acquire the other channel having at least the quality indicator greater than or equal to the predetermined threshold value.
- [c9] The method of claim 1, further comprising:
starting an initial scan timer before scanning any channels in the channel scan list; and
performing an initial acquisition scan in response to the initial scan timer expiring and failure to acquire the other channel having at least the quality indicator greater than or equal to the predetermined threshold value.
- [c10] The method of claim 1, wherein acquiring the other channel comprises acquiring one of a CDMA channel or an Advanced Mobile Phone Service (AMPS) channel.
- [c11] The method of claim 1, further comprising building the channel scan list, wherein the channel scan list includes channels on alternate systems.
- [c12] The method of claim 1, further comprising removing a channel from a grey zone channel list after the channel has been in the grey zone channel list for a predetermined period of time.
- [c13] The method of claim 1, wherein scanning any channels in the channel scan list comprises performing a microscan of any channels on a grey zone channel list.
- [c14] The method of claim 13, wherein performing a microscan comprises:
receiving a received signal strength indication (RSSI) for a channel in the grey zone channel list; and
comparing the RSSI to one of a threshold value or a previously received RSSI for the channel.
- [c15] The method of claim 1, further comprising programming the predetermined threshold value over-the-air.
- [c16] A method of selecting a communication system, comprising:
monitoring an E_C/I_O of a CDMA pilot channel; and
scanning any channels on a channel scan list to acquire another communication

system in response to the E_C / I_O of the CDMA pilot channel remaining below a predetermined threshold for a predetermined period of time.

- [c17] The method of claim 16, further comprising performing an initial acquisition scan in response to failing to acquire another communication system.
- [c18] The method of claim 16, further comprising:
receiving a first E_C / I_O of the CDMA pilot channel below a grey zone threshold value; and
receiving another E_C / I_O of the CDMA pilot channel below the grey zone threshold value after the predetermined period of time and before scanning any channels in the channel scan list to acquire another communication system.
- [c19] The method of claim 16, further comprising adding the CDMA pilot channel to a grey zone channel list.
- [c20] The method of claim 19, further comprising removing the CDMA pilot channel from the grey zone channel list after the CDMA pilot channel has been on the grey zone list for a predetermined period of time.
- [c21] The method of claim 16, wherein scanning any channels on the channel scan list comprises one of skipping any channels on the grey zone list or performing a microscan of any channels on the grey zone list.
- [c22] The method of claim 16, further comprising performing an initial acquisition scan after terminating a telephone call originated before acquiring the other communication system.
- [c23] A communication device, comprising:
a receiver to receive at least a quality indicator for a channel;
a channel scan list; and
a microprocessor adapted to cause scanning of any channels on the channel scan list in response to at least the quality indicator of the channel being below a predetermined threshold value.
- [c24] The communication device of claim 23, wherein the microprocessor is adapted to acquire another channel from the channel scan list in response to the other

channel having at least a quality indicator greater than or equal to the predetermined threshold value.

- [c25] The communication device of claim 23, wherein at least the quality indicator comprises an E_C / I_O of a code division multiple access (CDMA) pilot channel.
- [c26] The communication device of claim 23, further comprising a memory coupled to the microprocessor, wherein the memory includes a grey zone channel list.
- [c27] The communication device of claim 23, wherein the channel scan list comprises a preferred roaming list.
- [c28] The communication device of claim 23, further comprising a timer to cause the scanning of any channels on the channel scan list in response to at least the quality indicator of the channel being below the predetermined threshold for a predetermined period of time.
- [c29] The communication device of claim 23, further comprising an initial scan timer to cause an initial acquisition scan in response to a failure to acquire another channel from the channel scan list after a selected period of time.
- [c30] A computer-readable medium having computer-executable instructions for performing a method, comprising:
 receiving at least a quality indicator for a channel;
 scanning any channels on a channel scan list in response to at least the quality indicator of the channel being below a predetermined threshold value; and
 acquiring another channel from the channel scan list in response to the other channel having at least the quality indicator greater than or equal to the predetermined threshold value.
- [c31] The computer-readable medium having computer-executable instructions for performing the method of claim 30, wherein at least the quality indicator comprises an E_C / I_O of a code division multiple access (CDMA) pilot channel.
- [c32] The computer-readable medium having computer-executable instructions for performing the method of claim 30, wherein scanning any channels on the channel scan list comprises skipping any channels on a grey zone channel list.

[c33] The computer-readable medium having computer-executable instructions for performing the method of claim 30, further comprising:
 receiving at least another quality indicator after a predetermined time period before scanning any channels on the channel scan list; and
 scanning any channels on the channel scan list in response to the at least other quality indicator being below the predetermined threshold value.

[c34] The computer-readable medium having computer-executable instructions for performing the method of claim 30, further comprising adding the channel to a grey zone channel list in response to receiving at least the other quality indicator for the channel that is below the predetermined threshold value.